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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,067	08/20/2003	Masato Suzuki	031034	4345

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EXAMINER

RODRIGUEZ, SAUL

ART UNIT PAPER NUMBER

3681

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/644,067	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Saúl J. Rodríguez	<b>Art Unit</b> 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-17 is/are pending in the application.  
     4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 is/are allowed.
- 6) ☒ Claim(s) 8 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The following communication is responsive to the amendment filed March 16, 2005.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Election/Restrictions***

Applicant's election without traverse of Group II in the reply filed on September 24, 2004 is acknowledged.

Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 24, 2004.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rectangular segments must be shown or the feature(s) canceled from the claim(s). It should be

noted that Figs. 17 and 18 are not part of the record (since the Application Transmittal form indicates that 9 drawing sheets were filed, it appears that these figures were not part of the original presentation). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recites segments having a rectangular shape with curved opposite sides extending in a circumferential direction. It is noted that a rectangle is defined as a quadrilateral polygon in which all four angles are **right angles** and all sides are **line segments**. Given that the shape disclosed by the applicant fails to satisfy the abovementioned definition, it is unclear if the applicant intends to claim a rectangle or another shape. For rejection purposes, since the relationship between the opposite sides is unascertainable, it is believed that any shape substantially rectangular satisfies the claimed limitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('942) in view of Stefanutti et al. ('288).

Suzuki discloses a friction material comprising a core (32), a friction material substrate with segments (33) joined to the core wherein the side portions form straight lines with chamfered portions.

Suzuki et al. does not teach sides that are formed by press forming, if the segments are adhered to the core, or if the core is made of metal.

Concerning the material of the core, Stefanutti et al. discloses a friction material comprising a metal core (1), a friction material substrate with segments adhered to the core.

Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use metal for the core of Suzuki in further view of Stefanutti to provide a durable and inexpensive base for the segments.

Concerning the manufacturing method and its associated limitations, the method is not germane to the issue of patentability of the device itself. Therefore, it has not been given patentable weight.

Concerning the limitation of the parallel lines defining a separation between a pressed and un-pressed area, it is believed that Suzuki's lines formed at 39 and 40 anticipate the claimed limitation.

Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('942) in view of Suzuki et al. ('629)

Suzuki discloses a friction material comprising a core (32), a friction material substrate with segments (33) joined to the core wherein the side portions form straight lines with chamfered portions. Suzuki et al. does not teach if the sides are formed by press forming, if the segments are adhered to the core, or if the core is made of metal.

Suzuki, however, does not explicitly disclose the pressing the segment.

Suzuki et al. discloses a friction material comprising a core (1), a friction material substrate with segments (2) adhered to the core and stamped/pressed in its entirety (including its four sides).

Then, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the segments to the core and pressing the entire segment (including its four sides) to improve the endurance of the friction assembly.

Claims 17, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('942) in view of Kitaori et al. ('190) and further in view of Stefanutti et al. ('288).

Suzuki et al. does not teach a gap having a larger width at an outer periphery, if the segments are adhered to the core, or if the core is made of metal.

Kitaori et al. discloses the aforementioned basic configuration (Figd. 3-6). Then, it would have obvious to have gaps having a larger width at an outer periphery in the device of Suzuki in view of Kitaori to reduce the fluid shear between the components.

Concerning the material of the core and the adhesion of the segments, Stefanutti et al. discloses a friction material comprising a metal core (1), a friction material substrate with segments adhered to the core. Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use metal for the core of Suzuki in view of Kitaori et al. in further view of Stefanutti to provide a durable and inexpensive base for the segments. Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the

segments to the core of Suzuki in view of Kitaori et al. in further view of Stefanutti to securely fix the segments to the core.

***Allowable Subject Matter***

Claims 9-13 allowed.

***Response to Arguments***

Regarding applicant's arguments concerning heat compressed method for forming applied before joining the segment to the core metal, the examiner reaffirms that the method has no influence of the patentability of the device claim (applicant's implicit agreement with the examiner's observation is duly noted; pg. 9 of the amendment filed March 16, 2005). Consequently, and consistent with the First Action on the Merits, the method limitations are not believe to differentiate the claimed article from that of the prior art given that all other structural limitations have been met.

Concerning claims 15-16, reference is made to the new grounds of rejection.

Concerning claim 17, given the indefinite nature of the claimed limitations, the proposed rejection is deemed proper.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



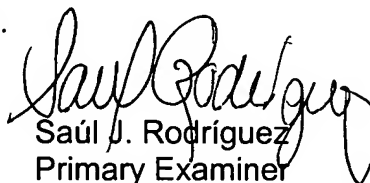
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saúl J. Rodríguez whose telephone number is (571) 272-7097. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Saúl J. Rodríguez  
Primary Examiner  
Art Unit 3681

  
SJR